

DCs as Primary Care Providers

NEW MANAGED CARE STUDY FINDS IMPROVED PATIENT OUTCOMES AND SIGNIFICANT COST SAVINGS WITH DC GATEKEEPERS

Editorial Staff

See *DC's* interview with the study authors at the conclusion of this article.

A new research paper published in the *Journal of Manipulative and Physiological Therapeutics (JMPT)* has found that a managed care network consisting of doctors of chiropractic as primary care providers (PCPs) provided equivalent care and saved substantial costs compared to patient management utilizing medical doctors and osteopaths.

The analysis found that chiropractors were not only able to diagnose and treat patients at a level nearly equal to medical doctors, but also that patients enrolled in the chiropractic network were admitted to the hospital less frequently, spent less time in the hospital for care, underwent far fewer surgeries and used far fewer pharmaceuticals than other HMO patients, resulting in tremendous cost savings and extremely high patient satisfaction scores.

"Reliance on the conventional medical model, in which pharmaceuticals and surgical interventions represent first-line treatment, may not provide the best therapeutic index to our patients," noted the study's authors. They added that a chiropractic gatekeeper model of managed care "seems to demonstrate the potential superiority of an integrated health system in which chiropractic and CAM therapies play a significant primary care role."

Foundations of the Chiropractic Gatekeeper Model

In 1996, a large health maintenance organization serving the needs of over 600,000 people in the Chicago area was approached and asked to consider the merits of gathering data on a system of health care that emphasized the use of complementary and alternative medicine (CAM). The idea behind the approach was to build an integrative system of health care using primary care physicians who specialized in nonpharmaceutical and nonsurgical approaches, and to compare patient and provider data from that system with more traditional HMOs.

The following year, an independent provider association (IPA) known as Alternative Medicine, Inc. (AMI) was created to serve as the new integrative health care system. It functioned within the classical gatekeeper HMO model, and adhered to the same rules and regulations as any other contracted conventional allopathic IPA.

Medical doctors, osteopaths and chiropractors in the area were all invited to join the new IPA network. Curiously, only doctors of chiropractic were willing to participate in the project; according to the authors, the MDs and DOs interviewed declined to take part in the project "for a variety of professional, personal, political and economic reasons."

To ensure that chiropractors could successfully function as primary care providers, a unique credentialing process was created, consisting of personal interviews; reviews of the DC's treatment modalities and scope-of-practice patterns; and educational seminars given by medical directors to review conventional medicine diagnostic and referral decision patterns. All of the chiropractors had to be credentialed before they could be included in the network and begin seeing patients.

AMI's credentialed chiropractor network began treating patients on Jan. 1, 1999, with an enrollment of just 37 members. By Dec. 31, 2002, enrollment had grown to 649, largely through "word of mouth" advertising from patients.

In the chiropractic network, the DCs performed all patient examinations, treatments and procedures at their own discretion. Recommended follow-up visits, choice of appropriate treatment, and ancillary therapies utilized did not require approval from a medical director; however, ancillary testing and treatment performed outside of a chiropractor's office was subject to MD approval, so that patients could benefit from a medical doctor's experience in dealing with more complex types and states of disease. If a life-threatening disease was diagnosed, or if the patient required hospitalization or allopathic care as a result of an advanced stage of disease, the chiropractor would delegate his or her authority over the patient to an attending medical physician who had been consulted on the case.

The chiropractors participating in the IPA had a higher number of initial patient visits, which were designed purposely to correct structural abnormalities in patients, and provide information on lifestyle and diet modifications to prevent more serious diseases from occurring in the future. In many instances, AMI enrollees saw their chiropractors an average of twice per month, sometimes more. "This is in contrast to conventional medical IPAs, wherein the majority of members have PCP encounters on a 'crisis-only' basis," the authors noted.

On several occasions, the chiropractors also utilized "nonphysician CAM providers" to provide care or on a referral basis, including acupuncturists, massage therapists, and health care professionals trained in cranial sacral therapy, cognitive therapy and stress management techniques.

AMI Model Leads to Better Patient Outcomes, Lower Costs, High Satisfaction Rates

Analysis of coding data by the chiropractic primary care physicians, combined with data on referrals to specialists and pharmaceutical usage, revealed that when making a patient diagnosis, "agreement was found between the conventional medical specialist and the chiropractic PCP 93.1% of the time." This analysis showed that properly credentialed chiropractors could diagnose conditions almost as well as medical doctors, including a range of conditions they might not normally see in the conventional chiropractic setting.

Comparison of ICD-9 diagnostic profile by percentage of member enrollment, AMI vs. comparison group I		
Diagnosis	AMI %	Comparison Group I%

Wellness	28.5%	34.7%
Orthopedic	23.5%	8.0%
Other medical	11.7%	17.0%
Mental health	8.1%	1.3%
Gynecology (non-obstetrics)	6.7%	9.4%
Sinus/chronic allergy	6.0%	2.8%
Cardiac/hypertension	4.6%	9.4%
Headache (all variants)	2.7%	0.7%
Neoplastic (all)	1.5%	1.1%
Upper respiratory infection	1.5%	10.4%
Asthma	1.4%	1.3%
Gastrointestinal	1.3%	0.9%
Diabetes	1.2%	3.4%
Thyroid disease (all)	1.2%	1.4%

A comparison of those cases seen by chiropractic PCPs and a comparison group of medical/osteopathic providers revealed some interesting similarities, particularly with respect to asthma and neoplastic conditions. The wellness category included those patients who had no visits, patients who came in for nonsymptomatic screening tests only, and encounters that did not receive an *ICD-9* code, but may have included chiropractic codes for subluxation/dysfunction.

AMI clinical outcomes comparison with HMO network data, 1999-2002*		
Data	AMI percentage utilization vs. HMO	AMI percentage reduction vs. HMO
Hospital-based data		
Hospital admissions/1000	57.0%	43.0%
Hospital days/1000	41.6%	58.4%
Average length of stay	76.2%	23.8%
Outpatient-based data		
Outpatient surgical cases/1,000		
Pharmaceutical usage (cost)	56.8%	43.2%
	48.2%	51.8%

* Obstetrics admission excluded from comparison percentages.

The authors also compared patient outcomes from 1999-2002 of patients enrolled in the AMI network versus those in the traditional HMO setting. There were demonstrably fewer hospital admissions among patients seeing a chiropractic PCP and fewer outpatient surgeries, and the cost associated with pharmaceutical usage among chiropractic PCP patients was approximately half that seen in traditional HMO patients. These findings demonstrated the chiropractic network's "apparent superior clinical outcomes" compared to conventional managed care statistics over the same time period.

One of the most dramatic differences between patients in the chiropractic network and those in other HMOs was in terms of hospital stays. In 2000, chiropractic patients spent 115 days in the hospital for every 1,000 "member months" they were enrolled in the network. For patients of medical/osteopathic PCPs, the number of hospital days per 1,000 member months ranged from 171 days to 344 days.

In addition to favorable clinical outcomes, patients enrolled in the chiropractic IPA gave it higher satisfaction scores than the rest of the HMO network. For the first four years of operation, AMI

satisfaction scores were 100%, 89%, 91% and 90%. "Analysis of HMO member satisfaction surveys demonstrates the AMI members consistently rated their experience with AMI above the HMO network normative average," the authors wrote. "The AMI experience seems to indicate that a nonpharmaceutical/nonsurgical orientation can reduce overall health care costs significantly and yet deliver high-quality care. These results have been achieved not by decreasing or denying access to care but, rather, by increasing the frequency of PCP prevention-oriented encounters."

The Chiropractic Gatekeeper Model: The Health Care System of Tomorrow?

Several studies have shown that of all the forms of complementary and alternative medicine practiced in the U.S., chiropractic is the most popular. Yet, as the authors of the article pointed out, "Core coverage by insurance benefit design rarely includes unrestricted access to chiropractic." Instead of providing unfettered access to chiropractors and other CAM providers, "a myriad of excuses, both by the private insurance industry, and by the federal government, currently reduce one's personal freedom by restricting access to choose unconventional medicine, even when practiced by licensed physicians in good standing."

A variety of excuses have also been put forth as to why doctors of chiropractic are often considered ineffective at being primary care providers, including a lack of training and education and experience, and philosophical differences with the allopathic model of care. The results of this study shatter the myth that chiropractors cannot function effectively as primary care providers in a managed care network, and shows they can diagnose, treat and refer patients as well as, if not better than, their allopathic colleagues.

According to the authors: "At the very least, this article, for the first time, has demonstrated that a select group of chiropractic physicians successfully functioned in both a safe and effective manner as PCPs in a classical gatekeeper HMO model. Second, it has demonstrated that these same chiropractic physicians were capable of initiating and coordinating care for patients with a broad spectrum of disease states, representing a wider variety of diagnostic presentations than is commonly seen in most chiropractic offices. Third, the magnitude of improvement in both clinical and cost outcomes compared with normative values is so large that it is difficult to dismiss as purely coincidental to population bias and nothing more."

As with most studies that compare one form of care to another, some limitations were noted in the analysis. The authors freely admitted that the number of patients enrolled in the chiropractic IPA paled in comparison to patient populations in the other HMOs, and that they were unable to determine the exact effect the transfer of members into and out of the network had on overall cost savings and clinical outcomes.

But despite these (and other) limits, the authors believe they may have come up with a model that could revolutionize the way people are cared for in the managed care system - one that could leave patients satisfied with the care they receive while delivering significant cost savings:

"The traditional argument against coverage for prevention-oriented medicine is that it will not reap immediate financial benefits and that employee or insurance turnover is too high to wait for an extended turnaround time. The AMI experience suggests that cost savings may occur in the first calendar year of operations.

"The magnitude of improvement in both clinical outcomes and cost savings documented herein may

not remain constant when the AMI model is utilized on larger and more diverse populations. However, even a small percentage of the AMI outcomes would still have significant implications, given a \$1.3 trillion national health care budget. At such a high price, AMI's initial results should warrant additional funding for a larger and better controlled replication of these findings."

[*Editor's note:* DC would like to acknowledge National University of Health Sciences and Elsevier for making this *JMPT* article available free of charge to the profession. The complete paper is available online at: <http://tinyurl.com/6m916>.]

Q & A With Drs. Sarnat and Winterstein

We interviewed Drs. Sarnat and Winterstein to learn more about their study findings and the potential ramifications for the chiropractic profession:

Dynamic Chiropractic (DC): Comparing the AMI model to the other HMOs in the analysis, what was the most surprising outcome of the study - reduced hospital stays, fewer surgical procedures, reduced use of pharmaceuticals, or something else?

Richard Sarnat (RS): I have always believed that the overutilization of pharmaceuticals and surgery and the underutilization of more natural healing techniques, such as chiropractic, has been the cause of great suffering. Yet, I had no idea that the magnitude of both clinical improvements and cost effectiveness would approach 50% in both cases. Previous studies have shown these types of savings when chiropractic has been used as a first-line treatment for NMS ailments, instead of traditional conventional medical care. But to see this level of effectiveness across the board for literally all types of clinical presentations within a primary care setting is surprising to me, and good news for the rest of the world.

DC: What does the study say about the ability of chiropractors to function in the managed care environment and deliver quality patient care?

RS: As already mentioned, AMI's outcomes clearly demonstrate that chiropractic belongs in a primary care setting within the managed care HMO model. However, it is important to remember that the chiropractors who functioned as primary care physicians (PCPs) within the AMI model are not necessarily representative of the profession at large. Having personally been involved with the credentialing of hundreds of chiropractors, I would guess that less than 50% of the profession is prepared to take on the enormous legal/medical responsibilities given to PCPs in an HMO gatekeeper model. Yet, paradoxically, that is where chiropractic can be most effective.

DC: We understand that your article was submitted to several medical journals, including *JAMA* and the *Archives of Internal Medicine*, but that they decided not to publish it. Why do you think those publications would not publish it?

RS: Actually, we did not submit to *JAMA*. We submitted to the *American Journal of Health Promotion and to Annals of Internal Medicine*. To quote one of the response letters written to me, "We cannot publish an article whose conclusions are so hostile to conventional medicine."

The journals also objected to what they felt was "editorializing," even though I restricted my subjective

opinions to the "conclusion" section of the publication. Clearly, both the scientific and political ramifications of our outcomes are something that the conventional medical journals did not feel comfortable with. So much for science...

DC: What do you hope members of the chiropractic profession and the medical profession will take from the study?

RS: The study really shows the enormous power and benefit of two things: 1) the utilization of chiropractic in a primary care setting; and 2) the magnitude of outcomes, both clinical and cost, that can be achieved when all members of the health sciences work together as a team for the betterment of the patient; putting aside all interprofessional rivalries. Hopefully, these results are so dramatic that they will "wake up" the health care system (or lack thereof) to the immediate need for true integration among all qualified health providers.

DC: Any final comments you'd like to add?

RS: Yes. There has been almost no research relating to the utilization of the chiropractic physician in the PCP role prior to this, and as a result, the tendency of those in decision-making positions, both within the profession and especially outside of it, and the conclusions drawn, particularly by those of the medical research community, are that chiropractic physicians are "back doctors." While there is still much to be learned about the application of broad-scope natural chiropractic care, this study could not be more timely, and clearly points to the outstanding potential for utilization of the chiropractic physician in a primary care setting while clearly valuing the concept of allopathic, osteopathic and chiropractic integrated medicine.

DC: Do you believe every doctor of chiropractic would qualify to be credentialed in the AMI program, and if not, why?

James Winterstein (JW): Unfortunately, not every doctor of chiropractic would qualify to be credentialed in the AMI HMO program. This program requires graduates who see themselves in the role of chiropractic physician - those who are willing and able to engage in broad-scope diagnosis and in broad-scope natural medicine. These are chiropractic physicians who see spinal manipulation as a valuable tool that is part of chiropractic practice, not synonymous with it. These are physicians who recognize the need for prescription drugs when clinically indicated and will refer the patient for those prescriptions.

The HMO credentialing process itself is quite rigorous and involves responses to case presentations, the kind of practice protocols which are typically utilized by the physician, and an evaluation of office equipment, procedures and practices to ensure that they meet the requirements of the NCQA [National Committee for Quality Assurance]. All offices are visited and must be compliant with NCQA requirements prior to the awarding of the AMI credential. A significant percentage of chiropractors, and certainly those who choose to engage in what is known as "subluxation-based practices," would not qualify for this program unless they could meet these requirements and would engage in the kind of practice outlined above.

DC: Do you see this type of program spreading across the country? If so, to what extent?

JW: In a modified form - a PPO format; this program is beginning to spread across the country as AMI promotes the use of chiropractic physicians to both governmental agencies and large self-insured corporations which are seeking ways to cut costs of health care. The credentialing process is not as rigorous as that required for the HMO, and doctors in various states are being credentialed and are functioning in the AMI PPO in order to promote improved health through preventive care, rather than simply addressing the disease state. The extent to which this spreads will depend on a number of factors, including:

1. Willingness of chiropractic physicians to accept the responsibility and the accountability needed for this kind of practice.
2. Education of the insurance industry regarding the potential for this kind of care. While there is a constant hue and cry about how bad things are, the status quo is difficult to change.
3. Willingness of the allopathic and osteopathic communities to recognize the education and resulting ability of the chiropractic physician to function in this kind of setting. In this regard, it is interesting to note that the diagnoses made by chiropractic physicians in this group were in agreement with those of the allopathic specialists just about 94% of the time. This is exceptional concurrence, in my opinion.

DC: To what extent do you see this model moving chiropractors away from the more traditional, spinal-care-only types of practices?

JW: Actually, I think the real "more traditional" kind of practice was closer to that provided by this AMI's HMO experience. I certainly learned that kind of practice in the '60s and practiced that way then. I believe that reimbursement issues and the necessary research initiatives which have concentrated on musculoskeletal concerns, for obvious reasons, have moved the profession into the "spine care" arena within the past two decades. Because we excel in the treatment of back pain, in my opinion, we have followed the line of least resistance and are now seen almost exclusively in that role, to the detriment of humanity, I believe. We have much more to offer the sick and suffering, and I hope we will reclaim our opportunity and our responsibility in the primary care arena.

DC: To what extent do you see the doctor of chiropractic as the gate-keeper to other CAM therapies?

JW: In those integrated practices of which I am aware, the referral, by chiropractic physicians, to other CAM practitioners is a routine matter. Unfortunately, what I see developing at the present time is a whole new turf battle. It is not enough that DCs and MDs have engaged in this turf war for a century; now we have new entities beginning the same thing. This is exactly why, after reading Warren I. Salmon, PhD -- *Alternative Medicines* (1984), I concluded that we must find a way to work in concert with other CAM providers and become colleagues, rather than competitors. Fortunately, the Board of Trustees of National University of Health Sciences saw this as well, and the result is that we changed National College of Chiropractic into National University of Health Sciences, precisely so that we could form an environment in which various CAM providers could learn together and could develop a collegiality. Will it work? I can only hope so, for it is the patient we must be most concerned with and I do not think competition among various types of providers serves patients well. I am most grateful to Dr. Richard Sarnat, who had the vision to make this HMO and subsequent PPO experience a reality, and to his partner, Mr. Jim Zechman, who supports [Dr. Sarnat's] vision for a potential "new day" in health care delivery.

